

Energy Board Network Viewpoints Year in Review



May 2009

Dear Energy Board Members,

It has been my pleasure to discuss energy industry issues with you throughout 2008 and 2009. The intention of the PricewaterhouseCoopers Energy Board Network is to foster dialogue and knowledge sharing among energy industry board members, and I believe in its first year, the Network has met that goal. We will continue to craft meaningful forums for you to discuss issues with your peers.

Following is a collection of articles from the Energy Board Network events held in 2008 and to date in 2009. I believe capturing our discussions in article form is helpful in reflecting on the complex issues facing the industry.

Thank you for making the PricewaterhouseCoopers Energy Board Network meaningful for energy company directors.

Sincerely,

A handwritten signature in black ink that reads "Rich Paterson". The signature is written in a cursive, flowing style.

Rich Paterson
Global Energy Sector Leader

Energy Board Network Viewpoints Year in Review

Inside

1	2008 Energy Board Symposium Viewpoints May 22, 2008	5
2	Energy Board Roundtable Viewpoints: Succession Planning and Talent Management August 14, 2008	23
3	Energy Board Roundtable Viewpoints: Foreign Corrupt Practices Act October 2, 2008	33
4	Energy Board Roundtable Viewpoints: US Energy Policy October 30, 2008	43
5	Energy Board Roundtable Viewpoints: Financial Crisis January 26, 2009	57



1

2008 Energy Board Symposium Viewpoints

The first energy board symposium was held on May 22, 2008 and featured discussion on the following topics:

- Facing the Hard Truths about Energy
- Political Risk and 2008 Global Energy Outlook
- Enterprise Risk Management:
ERM in the Real World
- Keeping in Step with Washington Policy
- Financial Reporting Standards:
What They Mean for the Energy Industry
- Your Company's Carbon Footprint:
Why You Need to Think About It
- Master Limited Partnerships:
Keys to Understanding This Increasingly
Employed Structure
- Fair Value Accounting: Why You Need to
Understand its Implications

Energy policy must make economic sense



Lee R. Raymond

Retired Chairman and Chief Executive Officer, Exxon Mobil Corporation Chairman

National Petroleum Council

Mr. Lee R. Raymond is the retired Chairman of the Board and Chief Executive Officer of Exxon Mobil Corporation. He had been Chairman of the Board and Chief Executive Officer of Exxon from 1993 until its merger with Mobil in 1999 and held the same position with ExxonMobil until he retired in December 2005. He began his career with Exxon after graduating from the University of Wisconsin with a B.S. in Chemical Engineering in 1960 and receiving a Ph.D. in the same discipline from the University of Minnesota in 1963. Mr. Raymond is a Director of JPMorgan Chase and Vice Chairman of the Board of Trustees of the American Enterprise Institute. He is Chairman of the National Petroleum Council, a trustee of the Wisconsin Alumni Research Foundation, a trustee of the Mayo Clinic, a member of the President's Export Council, and a member of the Innovations in Medicine Leadership Council of UT Southwestern Medical Center.

A general misunderstanding of today's global energy industry makes it difficult for the United States to formulate thoughtful, strategic policies, says Lee Raymond, retired chairman and chief executive officer of ExxonMobil Corporation and current chairman of the National Petroleum Council.

The industry's scale and the lengthy timeline needed to plan and implement projects that can make an impact are elements that elude the public and unfortunately many US lawmakers. In addition, US lawmakers fail to see energy in a "big picture" view and therefore can't adequately formulate meaningful policy, Raymond told directors in his keynote address at the Energy Board Symposium.

The industry's broad size is especially misunderstood by those who believe the US can change its energy portfolio overnight and who tout alternatives that would take decades to scale to commercial levels.

"In this country, we burn 150 billion gallons of gasoline a year," he

explained. "It is almost impossible to understand how big a number that is. Think about 150 billion one-gallon gas cans stacked one against one another—they would circle the Earth 1,000 times.

"You can't move the needle easily on an industry with that kind of scale."

Long-term thinking

Raymond also used some dramatic comparisons to illustrate the industry's long-term strategic thinking, a necessity due to lengthy project completion cycles.

"At ExxonMobil, we first began exploring for oil in Angola in 1993, and we fast-tracked every aspect of the project that we could," he said. "Even still, the first oil didn't come online until 2005. During those 12 years, we had five or six Congressional elections and three or four presidential elections.

"But to formulate meaningful, lasting energy policy, you have to choose a path and stick to it—you can't change direction every two to four years based on which political party is in office."

“Independence is a myth; our goal should be energy security through interdependence.”

Raymond described how France was able to ease its dependence on foreign energy following the oil embargo of the early 1970s.

“Before 1973, 75 percent of France’s electric power was generated by heavy oil,” he said. “When the country suffered during the embargo, the government made the decision to replace its existing power generation facilities with nuclear power plants, and they never wavered from that path. Today, 80 percent of France’s electricity comes from nuclear generation—and they enjoy the lowest cost of power in Europe.

“The lesson is that they didn’t meddle politically with their strategic plan—it was a sustained effort over a long, long time. And that is a real challenge for us in the United States.”

No ‘false choices’

The American Petroleum Council’s report on the nation’s energy future—titled *Facing the Hard Truths about Energy*—details a list of issues facing consumers, politicians and of course, energy companies themselves. Raymond, who currently serves as

chairman of the council, said the report makes it clear that US government and industry must do everything possible—on both the demand and supply sides of the equation—to ensure affordable energy.

“Every alternative that is economically viable must be pursued,” Raymond said. “And even if we do everything possible over the next 15-20 years, we will still be importing energy. Independence is a myth; our goal should be energy security through interdependence.

“Energy is just one example of globalization. The US is no longer the center of the universe.”

Raymond cautioned against the lure of false choices—the “either-or” mindset that causes us to overlook viable alternatives.

“We should be building infrastructure that adds to our energy security and that enables us to reduce the supplies we import, which helps keep the dollar strong against foreign currency,” he said.

“For example, we have to find a way to make better use of the enormous

coal resources we have here in the US—something like 200 years worth. And the US is the only major country in the world not building a nuclear power infrastructure, and that is a mistake. We expect the world to do for us what we will not do for ourselves...we don’t want to allow drilling in deepwater off our coast, we don’t utilize our domestic coal, we don’t have nuclear power—yet we want affordable energy.”

The solution, Raymond believes, is for government to set the direction and policy and then let the free enterprise system develop ideas that can stand the test of competition.

“Someone is going to have to stand up and deliver straight talk about our nation’s energy future,” he said. “The problem has been developing for 30 years in this nation, and to believe that we can quickly reverse our situation is naïve. It will take us 30 years to change course, if we have a plan that we can follow without fear of intervention or politics.”

Predicting the winners in today's fast-moving energy industry



Robert Johnston

Director,
Global Energy &
Natural Resources
Eurasia Group

Mr. Robert Johnston specializes in energy and commodity markets, with eleven years of experience in the financial, corporate, and academic sectors. At Eurasia Group, he directs a research team covering oil, gas/power, and metals/agriculture. He is the lead strategist responsible for Eurasia Group's outlook on commodities and serves as the primary contact for financial, corporate, and government clients on natural resources issues.

Foreseeing the energy industry's future has never been more difficult, Robert Johnston told participants at the PricewaterhouseCoopers Energy Board Symposium.

With oil prices moving quickly, geopolitical risks building under the surface in so many key producing areas and issues such as biofuels and emissions creating uncertainty both domestically and internationally, the industry is being buffeted by a confluence of factors that make accurate predictions a major challenge, said the director of Global Energy & Natural Resources at Eurasia Group.

"This is not just a story of oil," Johnson said. "The natural gas market is being impacted by some of the same geopolitical factors that are roiling the oil business."

Johnston stressed that some industry players were better equipped to come out on top despite of—or in some cases, because of—the fast pace of change.

Who will win?

Saudi Arabia is a clear-cut winner, Johnston said, because geopolitical power has shifted to favor OPEC's primary producers, and Saudi production is peaking at the right time, with a significant 2008-2012

upstream ramp that includes Khurais, the largest new Persian Gulf field since the 1950s. Still, Saudi Arabia is increasingly looking to China and India as its primary market, at the expense of Atlantic Basin countries.

"The Saudis plan to cap production at 12.5 million barrels per day because they believe that is all the market needs right now," Johnston said. "No one else believes that; most experts say that the market could absorb as much as the Saudis could produce. But they are concerned about the growth in biofuels in North America and production from Canada's oil sands, even though those sources won't have a sizeable impact for several years."

Iran will also be a winner in the near term, Johnston said. Since the release of a new National Intelligence Estimate in December 2007 that downplayed security concerns over the country's nuclear program, a number of significant energy infrastructure deals have been signed between Iran and producers from Asia and Europe. While there are still potential geopolitical risks looming due to the war in Iraq and the uncertain nuclear policy of the current political regime in Iran, the advance in foreign investment is a positive sign for the country's long-term prospects.

“...the industry is being buffeted by a confluence of factors that make accurate predictions a major challenge.”

Johnston said a third winner in the coming months will be the commodity index funds. “There is a lot of new capital coming in as these funds are used by a wide variety of investors to hedge against inflation,” Johnston said. “Supply will continue to be tight, and demand will be high. We will see the inflow continue until market concerns about global inflation and overly-accommodative monetary policy in the US diminish.”

Other players likely to prosper in the coming years include Brazil, a fast-growing oil exporter to the U.S, which like Canada is open to new investments; Kazakhstan, with its strong oil, uranium, copper and agriculture production; and Libya, with a surge in foreign investments under terms very favorable to the national oil company.

Who will lose?

Johnston also said that some industry players would struggle in coming years as market and geopolitical forces take a toll.

One group likely to face difficulties over the next few years includes LNG importers, who will be forced to deal with supply insecurity as traditional exporters limit shipments to meet growing demand in their own countries and new regasification infrastructure

comes online, adding markets to the mix and driving up prices.

In addition, Johnston said Venezuela and Mexico are “missing the party” due to persistent resource nationalism, ineffective energy reform and lack of investment in their current infrastructure.

Johnston also said that ethanol—once touted as an important contributor to the nation’s fuel mix—is now a “bad word” politically, and that surging grain prices are causing researchers to work even harder to find sources for second-generation, or non-food, biofuels.

“Biofuels from jatropha, camelina, castor oil and other non-edible feedstocks are getting lots of attention from investors, even though they don’t exist in a commercially viable way yet,” he said.

Players facing increased risk

Johnson highlighted a number of key areas of risk around the world, including:

- Iraq, with political uncertainties complicated by security concerns and a murky outlook for hydrocarbons law.
- US energy policy, with major pieces of activist legislation almost certain to be presented in the next few years.

- Canada, with oil sands costs rising due to recent royalty increases and changes in income tax law structure, compounded by expected carbon costs.
- US power generation, with carbon price uncertainties and a new administration seeking to push renewables.
- More fallout from the Kyoto Accord, with China’s massive coal supplies making it difficult to bring that country to agreement on the greenhouse gas emission programs already adopted in the European Union and being considered in the US

In closing, Johnson reminded participants that the price of oil had gone from around \$50 a barrel to more than \$135 a barrel without any major geopolitical shocks in producing regions around the world. With so much of the near-term future increase in daily production pegged to just three nations—Saudi Arabia, Nigeria and Angola—any geopolitical issue in those countries would have major implications for the energy industry as a whole, and certainly for consumers.

No set way to manage risk in today's volatile world



Robert Otteson

Risk Control Officer
Chevron Corporation

Mr. Robert L. Otteson is the Risk Control Officer for Chevron Corporation based in Houston, Texas. He is a graduate of The University of Utah (B.A. in Accounting—1981) and is a licensed Certified Public Accountant. Since joining Chevron in 1982, he has served in various Chevron Finance Department capacities with increasing responsibilities. Mr. Otteson has extensive experience with Chevron's global commodity trading operations in the finance function, as well as, having managed a comprehensive advanced systems development project.



Jonathan Stein

Vice President,
Chief Risk Officer
Hess Corporation

Mr. Jonathan Stein is the Chief Risk Officer of Hess Corporation responsible for providing transparency to senior management of the corporation of underlying risks and the control of these risks within limits for each business unit, with primary focus on trading, marketing and hedging activities across Marketing and Refining and Exploration and Production business segments. He manages a global team of professionals in Market Risk Controls, Credit Risk Controls, Compliance Controls, Product Control, Middle Office Operations and Risk Infrastructure.



Chuck C. Cook

Senior Vice President
and Treasurer
Dynege Corporation

Mr. Charles C. Cook serves as Senior Vice President of Strategic Planning, Corporate Business Development and Treasurer. His responsibilities include all financing, treasury, and risk control activities, as well as strategic planning and corporate business development.

The different ways that energy companies manage risk is as varied as the companies themselves, a group of risk management experts told the Energy Board Symposium audience.

Robert Otteson, risk control officer for Chevron Corporation, Jonathan Stein chief risk officer for Hess Corporation and Chuck Cook, senior vice president and treasurer for Dynege Corporation, all agreed that the management of risk was becoming increasingly important to energy companies—from the complexity of hedging and other financial tools to geopolitical risk that accompanies the search for oil and gas into developing “frontier” countries.

Even companies that are experienced in managing sub-surface risk are finding that geopolitical issues present a whole new set of challenges, Stein told the group.

“Political risk is more important to our company, and we are looking for ways to analyze that type of risk the same way we do market risk,” he explained. “The question we are asking is, ‘How can we build the same type of political risk models that we have for market,

“...all agreed that the management of risk was becoming increasingly important to energy companies – from the complexity of hedging and other financial tools to geopolitical risk that accompanies the search for oil and gas into developing “frontier” countries.”

credit and technical risk issues and utilize those in our business decisions?”

Risk and company culture

While each of the panelists has a different organizational reporting structure, the common factor among them is that risk management is embedded into the company culture.

At Dynegy, Cook said, the process in place reflects the organization’s flattened organizational structure.

“There are any number of different models that work, as long as the issue of risk management is addressed from the standpoint of the company’s unique corporate culture,” he said. “The key is whether management has bought into the idea that risk can and should be managed. Ideally, you would take a holistic approach, a team approach, and be able to trust each business unit addresses their risk issues, while providing a forum for them to communicate upwards when they have issues.”

At Chevron, Otteson’s role is to oversee risk and report potential issues to the chief financial officer. “But our model is to give responsibility to the business

unit management team to manage their particular risks,” he said.

Brand risk

Another increasingly important skill is the ability to understand and manage intangible risks to the company’s brand reputation or market position as an industry leader.

“Virtually every decision we make takes reputational risk into account,” Otteson said. “It is a very large, very real risk and it is very important to us. When you damage the company’s reputation, you also hurt its value—not just in terms of share price, but also its ability to work with partners and potential partners.

“Reputation means a lot—especially in the trading business. Our intellectual property, our ethics, the people we have...all of those are very important. We take reputation seriously.”

Board’s role

Stein said the board at Hess plays a critical role in setting the risk management agenda. “They are there to ask questions, to insist on transparency,” he said. “We believe that failure is often the result of a lack of transparency, because gathering

data is one key element to uncovering potential risks.”

Otteson seconded that thought, saying that the Chevron board works to ensure there is alignment between the responsibility for identifying risk, and the authority to mitigate it. “A strategic view of risk is essential,” he said.

“Capital investment programs offer a good example—how much risk are you willing to take on an individual project or in a particular country? The board can help set that agenda.”

The board can also help prevent issues such as trading fraud by asking pertinent questions about controls and about the type of data that is being presented to senior management.

“These kinds of breakdowns are about a lack of focus on basics,” Stein said. “The board can ensure that management is following the rules that you need to follow to maintain financial control.”

Preparing for regulatory change



**The Honorable
Bill Archer**

Senior Policy Advisor
PricewaterhouseCoopers

As the Senior Policy Advisor to PricewaterhouseCoopers LLP, the Honorable Bill Archer provides strategic advice to clients on a broad range of federal policy issues affecting business, including taxation, international trade, energy, Social Security and health care. Mr. Archer also works with PricewaterhouseCoopers' leaders to formulate strategic plans for the firm on federal policy matters.

Mr. Archer served as a Member of the US House of Representatives from 1971 to 2001, representing the 7th Congressional District of Texas. From 1995 to 2001, Mr. Archer served as Chairman of the Committee on Ways and Means.



Vincent P. Colman

National Professional
Service Leader
PricewaterhouseCoopers

Mr. Vincent Colman has a wide range of experience in accounting, auditing, financial reporting, mergers and acquisitions, and risk management. Currently Mr. Colman serves as the Firm's US National Professional Services Group Leader. The National Professional Services Group has overall responsibility for formulating the Firm's positions on technical accounting, auditing and SEC reporting matters, developing the Firm's audit policies and methodology and providing technical accounting and auditing guidance to the Firm's audit professionals.

Regulatory and political change is in the air, and the results are likely to come more quickly than most energy companies anticipate, said Vincent Colman, a PricewaterhouseCoopers partner and National Professional Services leader, in his shared presentation to Energy Board Symposium attendees.

His message was seconded by the Honorable Bill Archer, former member of the US House of Representatives and currently managing director and senior policy advisor at PricewaterhouseCoopers, who told the gathered board members that there is "tremendous discontent" among American citizens and that the calls for change would be heard by the next Congress.

Colman started his portion of the presentation by discussing the significant challenges the accounting and auditing profession has faced over the last five years—weakened investor confidence due to fraud and scandals; implementation of Sarbanes-Oxley 404; implementation of the SEC's 404 guidance and AS 5; and compliance with ever-growing complexity in accounting and reporting rules.

In addition, the credit crisis that struck in the second half of 2007 and early 2008 created a number of significant issues, such as increased scrutiny of securitization transactions, a renewed focus on off-balance sheet entities, the valuation of illiquid investments and the

relevance of fair value accounting—all of which caused many companies to take a fresh look at their internal controls and enterprise risk management systems.

Areas of change

Colman predicted that in the coming months, the SEC will focus on a number of key areas for change before a new administration takes office in 2009:

- To improve US competitiveness, the SEC will work to untangle some regulations passed in recent years and reduce their complexity. Colman said that current SEC leadership is concerned that some rules—made in response to corporate accounting scandals—are too restrictive.
- The commission will provide additional guidance on materiality in order to try and stem the number of financial restatements companies are making. In 2006, 1,850 US companies were forced to restate earnings, with another 1,200 companies issuing restatements in 2007. Yet just over a decade ago, in 1995, the number of restatements was around 300. "The goal will be to provide managements and boards additional guidance to make judgments about what is material and what isn't," Colman said. "The SEC wants to get back to a 'range of reasonableness' with regard to restatements, and reduce the numbers by eliminating unnecessary restatements."

“...the SEC will focus on a number of key areas for change before a new administration takes office in 2009.”

- The SEC will provide more support for “judgment.” If companies follow a process to document their accounting judgments including linkage to the professional literature and alternatives considered along with transparent disclosure, these companies will be in a much better position when a regulator comes along to review and challenge those judgments. “It’s a benefit to companies that are trying to do the right thing,” Colman said.
- Finally, the SEC is actively working on an updated “roadmap” to the implementation of International Financial Reporting Standards (IFRS) in the US, with an expected timeline toward ultimate mandatory application of IFRS in the US of approximately five to seven years.

Colman also predicted that the Public Company Accounting Oversight Board—which has been criticized for not conducting a thorough review of market capitalizations of US-based companies—would take steps to improve its market cap coverage and would get involved in setting audit standards that further converge with international auditing standards—following the lead set by the FASB-IASB’s convergence of professional accounting standards.

Colman suggested that the board members in attendance could encourage their companies to engage

in the IFRS standards setting process by drafting comment letter responses to new proposed standards and other activities.

Political landscape shifting

Archer followed Colman’s presentation with an in-depth look at the changing regulatory climate in Washington, D.C., with insight gained from years of public service and experience as chairman of the House Ways and Means Committee.

“The political landscape changes regularly in Washington, and that is by design,” Archer said. “But we are headed into the biggest change in policy and philosophy ever seen, at least in my lifetime.”

Archer said that the American people are unhappy with the direction the country has taken in recent years and that they want change—regardless of whether that change is good in the long-term. Congress, he said, will go along, because politicians will always do what they believe the people want them to do.

“Our tax policy—like our energy policy—is not driven by what is good for the country,” he said. “It’s driven by politics and the budget.”

Archer predicted that since the Congress can’t summon the political will to cut spending, the next Administration will likely propose major increases in tax

revenues to reduce burgeoning deficits and debt. In 2009, he said, there will most likely be “dramatic changes” in the tax code that will impact every US company. And that scenario bodes ill for the energy industry, with potential issues ranging from increased corporate income taxes to carbon taxes to an elimination of tax deferral on income earned in other countries.

Tax issues looming

“There is great vulnerability on the foreign tax credit issue with Congress,” Archer said. “Yet at the same time, other countries that currently allow double taxation of foreign revenues are beginning to rethink that position because of the negative impact it has on competitiveness. And here we are considering it as a politically viable way of raising tax revenues.”

Archer said the energy industry may wind up being penalized for its efficiency and global reach.

“The oil and gas industry does a great job—prices may be high today but gasoline is always available at every corner station in this country, round the clock and seven days a week,” he said. “The American people don’t appreciate that enough.”

“But we are pushing toward a giant tax train wreck in this country, and there will be folks who have to pay the price when all is said and done.”

“But we are pushing toward a giant tax train wreck in this country, and there will be folks who have to pay the price when all is said and done.”

IFRS is inevitable, and the time to act is now



John Phillips

US Energy IFRS Leader
PricewaterhouseCoopers

Mr. John Phillips is a Houston partner with over 18 years of experience in servicing clients in the energy industry. He is a certified public accountant licensed to practice in both Texas and Louisiana. Mr. Phillips has international experience with companies such as Royal Dutch Shell, Saudi Aramco, and Motiva Enterprises LLC. Mr. Phillips has considerable International Financial Reporting Standards (IFRS) experience and is the US Energy IFRS transition leader, having recently helped Shell Oil Company with their IFRS conversion.

The ever-increasing globalization of business is driving the adoption of worldwide accounting standards, but US-based energy companies can benefit from those changes with the right strategic approach, John Phillips told Energy Board Symposium attendees.

The PricewaterhouseCoopers partner, John Phillips, serves as the US Energy transition leader for companies implementing International Financial Reporting Standards (IFRS). He was joined in the discussion by Randy Braud, US Country Controller for Shell Oil Company, which recently underwent IFRS implementation.

Phillips stressed that while some companies see IFRS as merely a compliance issue, smart directors and officers view it as a business transformation that can create value by streamlining accounting activities, implementing appropriate controls and reducing costs.

“Vendors, partners, competitors—everyone—is beginning to use this

system, and you need to speak the same language,” he explained. “The time to act is now. Companies that begin thinking and planning for IFRS implementation—those that take the time to truly understand the differences between the US-based accounting standards they use now and IFRS—will benefit the most.”

US adoption just beginning

Phillips provided attendees with a quick overview of the growth in IFRS adoption around the world, pointing out that the US was the only major capital market that had yet to convert, although he predicted that some US-based companies could begin conversion as soon as 2009.

Those that do will find that the differences between IFRS and current domestic accounting practices are substantial—touching almost all major processes, transactions and balances—and require significant decision-making and process development prior to implementation, Phillips said.



Randy J. Braud

US Country Controller
Shell Oil Company

Mr. Randy Braud, US Country Controller, Shell Oil Company, joined Shell in 1974 after receiving a Bachelor of Science Degree in Business Administration and Finance from Nicholls State University, Thibodaux, Louisiana. He has supplemented his undergraduate degree by participating in Leadership/Executive Development Programs at Kellogg, Rice, and INSEAD. Mr. Braud's assignments include financial leadership positions at several refineries and chemical plants, as well as various roles in Shell's US headquarters in Houston, Texas.

“IFRS guidelines are about 2,500 pages. So it’s not only easier for us, but it also makes it possible to harmonize our global reporting systems because everyone around the world is using the same accounting principles.”

While US GAAP is more prescriptive and rules-based, IFRS is a principles-based system that allows greater use of “fair value,” he explained.

Braud opened his segment of the presentation by telling directors that while he was immersed in his company’s transition to IFRS during 2002, he was skeptical he would talk about the new standards in a positive way six years later. But his opinion changed as he and his company became comfortable with IFRS, and he believes the benefits have been meaningful.

“The guidelines for US GAAP run upwards of 25,000 pages,” Braud said. “IFRS guidelines are about 2,500 pages. So it’s not only easier for us, but it also makes it possible to harmonize our global reporting systems because everyone around the world is using the same accounting principles.”

Managing the change

Braud likened IFRS implementation to the process required for adoption of Sarbanes-Oxley, “except it was less

expensive.” The key, he explained, is taking a change management approach to the implementation:

- Changing people—communicating with both international and external audiences, such as analysts, and training financial/accounting personnel along with operational staff.
- Changing processes—enhancing existing processes to fit the new accounting principles, drafting and approving new processes and rethinking internal controls all play a role in this part of the transition effort.
- Changing systems—aligning systems with new processes.

Braud and Phillips stressed that boards play an important oversight role in the transition to IFRS, making certain that their companies follow a strategic, well-planned approach to transition that includes:

- Forming an IFRS steering committee.
- Analyzing the costs and benefits of transition.

- Approving change managing strategies.
- Analyzing IFRS accounting policies and their impact on reported results.
- Assessing debt agreements and other contracts for modification as needed.
- Looking for opportunities to centralize accounting functions.
- Embedding IFRS into operations and existing systems.
- Communicating with investors and other stakeholders.

“The hard part of a transition to IFRS is making the numerous accounting and policy decisions that are required,” Phillips said. “But companies that devote the proper resources—experienced staff members and qualified outside guidance—are those that will reap the benefits, which include reduced complexity, simplified financial reporting, increased global comparability and reduced cost of capital.”

Clear benefits to being sustainable



Fred Cohen

Global and US Energy
Leader for Finance,
Operations, Risk and
Compliance Advisory
Services

PricewaterhouseCoopers

Mr. Fred Cohen is the Global and US Energy Leader for Finance, Operations, Risk and Compliance Advisory Services at PricewaterhouseCoopers. He has over thirty-five years of consulting and management experience with global energy corporations on business strategy, organizational structure, financial risk management and financial reporting.

Mr. Cohen has extensive experience helping leading energy and utility clients identify and address their business and financial risks and develop and implement new strategies and enterprise management procedures.

Understanding and managing your company's "carbon footprint"—its total emissions of carbon dioxide and other greenhouse gases—is a key element of corporate social responsibility and a necessity for today's large energy companies, Fred Cohen told attendees at the Energy Board Symposium.

Cohen, who serves as the Global Energy Advisory Services Leader for PricewaterhouseCoopers, told the group that behind every unit of carbon is a unit of energy, which makes managing emissions a supply issue as well as an environmental one. Properly managing carbon emissions can reduce costs, improve profitability and reduce risks related to litigation and regulation.

"There are clear benefits to being sustainable," Cohen said. "Recent studies show that consumers will pay a premium for ethical behavior and

employees increasingly care about issues such as emissions. Companies that have a measurable, verifiable carbon reduction program in place have a definite advantage in their brand positioning and their recruiting and retention—all key benefits in a competitive marketplace."

Emissions-related risks

Following Cohen's remarks, Robert Schick, partner and co-head of litigation for Vinson & Elkins, addressed the risks that companies face as the issue of emissions grows in importance:

- Legislative action
- Judicial action
- Regulations
- Regional initiatives

Schick said in the US, the debate on legislative action centers on two potential programs—a carbon tax or a cap-and-trade system. A carbon tax involves a fee or charge



Robert M. Schick

Partner,
Co-Head of Litigation
Vinson & Elkins LLP

Mr. Bob M. Schick has over twenty-five years of experience in all aspects of products liability, environmental and complex tort and class-wide litigation at both the trial and appellate levels. He has begun over 50 jury and arbitration trials and taken more than 30 cases to a jury verdict. Mr. Schick handles significant premises liability and construction-related litigation, as well as litigation arising from the oil and gas industry.

“Companies that have a measurable, verifiable carbon reduction program in place have a definite advantage in their brand positioning and their recruiting and retention – all key benefits in a competitive marketplace.”

on greenhouse gas emissions, fixing a set price for emissions without guaranteeing a certain amount of reduction. Companies can continue or even increase their emissions as long as they are willing to pay for that privilege via the carbon tax. Cap-and-trade sets a limit on emissions and allows companies that are below their permitted amount to trade allowances to companies that exceed the limits.

In the European Union, the trading of emissions credits is a \$60 billion a year business, with costs for carbon dioxide running about \$50 per ton.

“It is very likely that we will see a cap-and-trade bill introduced into Congress by 2009,” Schick said. “And most observers believe the US will eventually settle on cap-and-trade because there is a successful model already in place in Europe.”

Potential for litigation

The risk of expensive, time-consuming litigation is also playing a role in the increased focus on carbon footprint reduction. Regulatory litigation, permit challenges, nuisance pollution cases, government enforcement cases and cap-and-trade contract disputes all threaten to create headaches for companies not attuned to the importance of carbon emissions.

“We are already seeing an increase in these types of cases around the country,” Schick said, “and they are having a definite impact, causing government entities to tighten their focus on the issue of emissions.”

The SEC could also play a role in emissions reporting by requiring companies to more uniformly disclose potential liabilities and negative impacts from climate change and

emissions reduction efforts. Cohen said it was inevitable that the volume of measuring and reporting on carbon footprints would increase in the future, and that the importance of third-party verification of emissions data would become critical for companies seeking to have their emissions efforts taken seriously.

In closing, both Cohen and Schick stressed that sustainability is good business when managed appropriately and can deliver cost savings and help meet stakeholder expectations. Companies that view emissions reductions as a key business improvement—embedding that thinking throughout their operations—will gain the most benefit from their efforts.

Why are MLPs so popular in today's markets and what are the recent trends for this growth vehicle?



Simon Tait
MLP Practice Leader
PricewaterhouseCoopers

Mr. Simon Tait is a Houston-based Assurance partner with 17 years experience serving energy clients. Mr. Tait's primary focus is on oil and gas companies and energy service companies. From 2000 to 2005, he joined the energy practice in Moscow, serving Gazprom, TNK-BP and Tatneft. Mr. Tait has focused most of his recent time working with master limited partnerships and taking an active role in developing the MLP practice in Houston.



Tim Fenn
Partner
Vinson & Elkins LLP

As a Houston-based partner with Vinson & Elkins LLP, Mr. Tim Fenn's principal area of practice is domestic and international business taxation, with a focus on partnerships. Much of his practice involves the taxation of publicly traded partnerships ("MLPs") and other clients in the energy industry.

Many management teams of energy companies have a reasonable understanding of master limited partnerships (MLPs) but the extent of their use and the successes and recent trends of existing MLPs can often be overlooked, says Simon Tait, partner at PricewaterhouseCoopers.

Tait was joined at the presentation by Tim Fenn, a partner at Vinson & Elkins, who specializes in helping companies structure new MLPs and MLP related transactions. Fenn explained to directors gathered for the Energy Board Symposium that MLPs—either as limited partnerships or limited liability corporations—are publicly traded companies but with typically less float than 'C-Corps'. They are primarily a high yield cash vehicle for retail and institutional investors who want a growing distribution stream in a tax efficient vehicle and a strongly aligned relationship with management. The benefits to sponsors include continued control of assets, lower cost of capital and a unit that generally trades at a higher multiple than its C-Corp counterparts.

Fenn explained the legal structure of a typical MLP and provided some

examples of how that structure works in actuality. This included the general governance structure and impact of incentive distribution rights.

Industry flourishing

Although the first MLPs emerged in the early 1980s, many of the first MLPs—primarily E&P and refinery assets—imploded due to adverse economic conditions, insufficient focus on reinvestment in the businesses, and unhedged exposures to commodity prices with resulting difficulties in paying distributions. "MLPs provide a tax efficient vehicle for investors but they are still a business and it is possible to go bankrupt," Fenn said.

However, the industry rebounded in the 1990s—primarily through larger midstream MLPs who had assets that were relatively low cost to maintain, offered minimal exposure to volatile commodity prices and had relatively stable revenue flows. More recently, we have seen the re-emergence of MLPs in other energy sub-sectors, including upstream, downstream, LNG, coal and shipping. Tait highlighted that today there are more than 70 MLPs in the US with a total market cap of more than \$130 billion. This is a significant

“The benefits to sponsors include continued control of assets, lower cost of capital and a unit that generally trades at a higher multiple than its C-Corp counterparts.”

increase from 1995 when the total market cap of the MLP sector was only \$5 billion.

Fenn stressed that there are a number of recent trends that are impacting the MLP landscape, including:

- A significant increase in the number of MLPs entering the market.
- A diversification in the types of qualifying assets and their location.
- A reduction in the minimum size for MLP initial public offerings.
- Growth in the aggregate market capitalization.
- An increase in institutional interest and ownership.
- Public offerings of general partner entities.
- The advent of foreign MLPs.

Fenn said that MLPs can be structured and governed so that they are almost immune to hostile takeovers and that as long as the board’s special committee does its job properly—by conscientiously performing its duties and, in appropriate cases, hiring advisors and outside counsel—legal protection is enhanced with respect to board membership.

Looking for growth

In the past, most MLPs grew primarily through acquisitions. However, as accretive acquisitions have become more difficult to find, today’s MLPs seek growth through a combination of organic capital projects and opportunistic business combinations. In 2007, MLPs announced 92 acquisitions for \$17.6 billion and spent over \$10 billion on organic growth projects. In terms of growth in aggregate market capitalization, market cap increased from \$111 billion in 2006 to over \$130 billion today and generated an average increase in distributions of 9.2%, according to market data published by Wachovia. MLPs are very active and constantly need new capital to feed the growth—thus they are very active in the capital markets with regular debt and equity offerings.

Tait commented that delays in the completion of capital projects and cost overruns have the potential of adversely impacting desired future distributions and growth rate targets. In contrast to C-Corps, MLPs have limited shock absorbers for cost overruns because of the focus on available cash. Identifying and managing all relevant risks related to organic projects can not

only save money, but also save a MLPs reputation. Investors want growth but they also want predictable cash flows. Late warnings of cost overruns can cause them to lose confidence in management and question growth targets.

Boards also must take the lead to ensure that their MLPs have sufficient back office capacity to keep up with growth. “Management must understand the resource needs that the MLP will face when new projects come online and it is the board’s responsibility to ensure that the leadership team is prepared to manage growth,” Tait said.

In his closing remarks, Tait said, “MLPs are often very dynamic entities and cash is certainly king. The opportunities and challenges MLPs face will generally depend on the stage of development that an MLP finds itself in and the current business and investment environment, but one can be assured that MLP board members should never be bored.”

Changes in reporting ‘fair value’ require vigilance



Martha Z. Carnes
US Energy Assurance
Leader
PricewaterhouseCoopers

Ms. Martha Carnes has over twenty-five years of experience with PricewaterhouseCoopers and is the leader of our US Energy and Mining Assurance practice, as well as one of the Firm’s global subject matter experts for the natural gas industry. Ms. Carnes serves energy Assurance clients, including natural gas transmission and distribution, natural gas and power trading and marketing, and oil and gas exploration and production.

New standards in determining and reporting on “fair value” have significant implications to be considered as energy company board members execute their fiduciary duties, Martha Carnes told attendees at the Energy Board Symposium.

The PricewaterhouseCoopers partner explained that the issuance of FAS 157, which took effect in the first quarter of 2008, is designed to give preparers a standard by which fair value should be determined as well as investors a better view of the liquidity and reliability of amounts presented in companies’ financial statements at fair value.

“FAS 157 provides a tighter definition of fair value and requires more transparency around how those values are determined,” Carnes said. For example, in the past fair value was determined by the entry price of an asset; now, companies are required to use the exit price of an asset, which can be significantly different, especially for assets held over a period of time.

“In the case of a business combination, the new rules take into account how a market participant would use a particular asset, and values it accordingly,” Carnes said. “That means companies will have to assign value to assets they have no plans to use.”

Carnes walked participants through a hypothetical example of how participants might value a 10-year structured natural gas swap between a merchant energy company and an E&P company. “It’s entirely possible that the two companies – looking at the same transaction—might come up with very different values,” Carnes said. “The merchant energy company is more likely to have reliable 10-year price data, and might have access to different data sources. The upstream energy company may be more of a price-taker and have much less reliable information to use in their valuation.”

In these types of cases, Carnes said, the key to compliance is proper disclosure. For example, the company should disclose the specifics around:

“FAS 157 provides a tighter definition of fair value and requires more transparency around how those values are determined”

- How and where fair value is used.
- The methods used to measure fair value.
- A perspective about the reliability of the inputs used to determine those fair values.

The new standard includes what is called a “fair value hierarchy” which is designed to provide greater transparency and comparability among reporting entities. Within this hierarchy there are three levels.

Level 1 includes fair value determined by observable, quoted prices for identical assets or liabilities in active markets. “These are the most liquid and reliable values,” Carnes said.

Level 2 includes fair value determined by quoted prices for similar items in active markets, or similar/identical items in non-active markets.

Level 3 comprises fair value determined by unobservable inputs, such as a company’s own data, and requires significant disclosure in the company’s financial reporting.

“In more complex valuations, boards and senior management should ask if outside experts were involved in helping to determine fair value and if not, were the internal staff involved skilled in modeling,” Carnes said.

“They will also want to know what types of internal controls were in place and whether the determination of fair value of certain assets and liabilities plays a role in compensation agreements. These are key questions that should be addressed.”

Carnes ended her presentation by providing two key questions board members should ask their management teams regarding fair value:

- How has management determined the fair value of its portfolio?
- What significant assumptions and inputs are used in valuation models?

“It’s important that directors understand how management has evaluated and validated these key assumptions, and whether they are reflective of current market conditions,” Carnes said.

“Along with that, directors should understand the extent of the use of models to derive fair value, the source of those models and how those models behave during extreme market conditions.”

The implementation and impact of fair value accounting must also be disclosed thoroughly in management’s discussion and analysis.

“Finally, it is critical that board members understand the implications of any increased volatility in earnings that may result from the utilization of fair value standards” Carnes said. She suggested that companies involve their investor relations group to help communicate the impact of the new fair value standards on earnings to key stakeholders.



2

Energy Board Roundtable Viewpoints: Succession Planning and Talent Management

The first energy board roundtable discussion was held on August 14, 2008, and featured a discussion of talent management and succession planning.

Background

The energy industry's aging workforce and shortage of skilled, experienced executives, managers and staff employees is forcing companies to focus on human resources issues more than ever. Energy companies are scrambling to fill gaps, find and keep talent and manage younger employees with different values than those held by past generations. The challenge extends from the boardroom to the field, as the industry strives to create and maintain a workforce that can meet today's—and tomorrow's—energy needs.

The shortage of qualified leaders, especially, makes succession planning even more critical for energy companies. Finding board members and senior executives who can bring value and knowledge to their roles means actively managing the succession process to ensure smooth transitions.

The PricewaterhouseCoopers Energy Board Network Roundtable—held in Houston on August 14, 2008—provided insight into the succession planning and talent management experiences of several energy companies and input from PwC's panel of experts.

Discussion highlights

“Our company has had a difficult time recruiting new directors for our board. Are we unique or is this an industry-wide problem?”

The reality is that companies across all spectrums are finding it difficult to replace or recruit directors. University of Southern California performs an annual survey on board effectiveness, and in 2007, nearly three-quarters (74 percent) of respondents agreed that it was more difficult to recruit directors due to Sarbanes-Oxley and the resulting potential liability.

In addition, the survey found that the number of hours required for active board participation had increased by a third since 2002, making it a more demanding effort and in some cases reducing the number of boards on which individuals can serve.

Some companies, too, have begun restricting their chief executives from serving on other boards. And in response to shareholder requests, some are reducing the number of inside directors and adding to the number of outside directors, especially those with financial or international experience.

For example, in 2000, 53 percent of all new directors were CEOs from other companies. In 2007, that number had declined to 33 percent.

These trends are increasing demand and reducing the supply of

experienced board members. The end result is that finding experienced, capable board members to serve is more difficult than ever. Some companies are responding by looking beyond CEO offices and considering board members that hold other C-suite or vice president titles. In 2000, only seven percent of new board members were non-CEOs; that number rose to 21 percent in 2007.

“Relevant industry experience is still a key consideration for new board members.”

Despite the difficulty in finding experienced board members, roundtable participants believe that industry knowledge is still critical. While conflict of interest rules may exacerbate the issue, directors with in-depth experience in the energy business can provide more useful guidance than those new to the industry.

Given that it may take someone with no technical background in energy three to four years just to learn the business, companies are broadening their searches to include board candidates with relevant experience even if it is indirectly related. An example would be an E&P company recruiting a board member with a background in oilfield services.

Some companies use an “experience matrix” to determine the areas where potential board members are strong,

and they compare that with their existing board to determine if there is a fit. If a new board member has needed experience outside of the energy business—but it complements the existing board’s strengths or fills a gap—then the director can be trained in oil and gas industry specifics.

In addition to industry experience, it is vitally important that new board members have some experience in either serving on or working with a board. Individuals such as chief financial officers or audit compliance officers can often make good board members—even if they are not CEOs—because they understand the level of informational detail that boards require and they are experienced in answering questions and responding to board inquiries.

One suggestion for ensuring that inexperienced members have access to peer knowledge was to expand boards when directors announce they are leaving so there is overlap of incoming and outgoing members. This allows new directors time to learn from those who are retiring. Another was to select directors with varying ages so that multiple retirements do not occur in the same timeframe.

Participants agreed that increasing specialization of board members was likely. There was no consensus, however, on whether boards will begin seeking directors with expertise in issues such as environmental issues or public relations.

“Directors with experience should be encouraged to stay as long as possible.”

Because of the increasing complexity of board work and the difficulty in finding experienced replacements, long tenure is more valuable than ever. More and more companies today are implementing mandatory retirement ages for directors, but just as many are pushing that age back further to keep board members longer. In addition, only 20 percent of public companies have mandatory term limits for directors.

One trend that is gaining favor is the reduction in term length from three years to one year, requiring directors to stand for election annually. Another trend is the regular rotation of committees and chair leads, but participants cautioned that companies must be careful not to move directors into roles in which they are not suited.

“Board evaluations can be helpful if managed correctly.”

Companies today are including board members in annual evaluations, many of them the “360 degree” type that include feedback from peers and subordinates. Anonymous, confidential evaluations can provide much-needed guidance for directors, and ensure they are held to the same standard as senior management. At the same time, gathering input from directors as to the CEO’s

management style and strategic approach helps provide insight into his or her true performance.

Participants agreed that constructive, confidential feedback can help directors improve their contributions to the company and can enhance the working relationship between the CEO and the board.

“The board should be directly involved in succession planning for senior management.”

With the changes in the available talent pool, more and more companies are utilizing outside consultants to help them in succession planning—a valuable resource but one in which the board should remain actively involved.

The loss of a CEO can happen at any time and every company needs to be ready for that eventuality with a planned, orderly succession. Outside consultants can help boards identify talent—both internally and externally—and create succession plans that ensure at least interim leadership in the event of a sudden departure or loss of a CEO.

The ongoing evaluation and ranking of key company leaders is critical, as are career development plans that help top performers gain needed experience and improve on weaknesses.

Directors should also benchmark external talent and have access to up-to-date information about outstanding industry performers who could be recruited to fill key slots.

The consensus among roundtable participants is that many CEOs can benefit from training provided by consultants designed to enable them to work better with key subordinates. This enables companies to keep experienced, talented people on hand.

The development of a talent “book” for use by directors in succession planning can be beneficial in helping boards understand strengths and weaknesses throughout the company, but it must be kept up to date. Too often companies spend time developing a talent book and then fail to update it, or worse, don’t use it when considering candidates for top spots. The act of preparing the talent book, however, forces management to evaluate its people and identifies managers who are not developing employees. It helps place accountability for succession planning on the management team.

“Ideally, directors will have access to internal talent to strengthen the succession process.”

The best approach to identifying talent is to ensure that the process is given sufficient importance by the

board and senior management. A proper succession planning process should include:

- Regular internal and consultant-led interviews of key leaders.
- Development and frequent updating of a corporate talent book.
- Identification of top-quality external candidates.
- Ongoing development coaching and skills training of potential and current leaders.
- Detailed succession plans in the event of the loss of the CEO or other key leader.

In addition, board members should be given access to senior managers and other high-potential employees on a regular basis. This can be in the form of presentations to the board, question-and-answer sessions, social events and more. Most participants believe that it is valuable for directors to know the broad line of senior managers, and good for the managers to gain comfort discussing issues with the board and learning how to present pertinent information succinctly.

“Smart-thinking companies are using every tool they have available to find and retain talent.”

Energy companies are getting involved at the high school and university levels to ensure that top-quality students pursue STEM studies—science, technology, engineering and math.

They are creating internships, endowing chairs, investing in engineering programs and more. Additionally, they are increasing salaries and bonuses to attract talented students. Most starting salaries for engineers top \$100,000 today, with signing bonuses of \$10,000–\$20,000.

These efforts are paying off with increased enrollment in science and engineering programs, but companies are also recruiting heavily around the world to boost their ranks. Participants stressed that companies needed to look beyond their typical recruiting sources and work to attract women, minorities, students from other countries and universities not typically known for engineering.

In addition, many energy companies are subsidizing continuing education, some by creating innovative programs that can develop petroleum engineers more quickly than traditional methods.

To retain more senior employees, companies are experimenting with a wide range of compensation programs, including some as innovative as giving a percentage of production to those responsible for it. And they are working hard to better understand the unique values and beliefs about work that different generations hold, so they can customize everything from assignments to compensation.

What is the consensus?

Energy company boards must take responsibility for managing the succession planning process within their organizations, with an eye toward understanding both internal and external talent. Succession planning is an ongoing effort, not a one-time exercise, and it should involve analysis of current talent, annual evaluations, personnel development plans, coaching of key leaders and exposure of senior managers to the board on a regular basis.

In addition, boards must work directly with the leadership team to ensure that recruiting, retention, development and compensation plans are aligned with the company's long-term strategic plans to ensure that the organization has access to top talent. Given the shortage of skilled, experienced employees in the industry, this will grow in importance in the coming years. Some participants even foresee mergers and acquisitions based on gaining access to talent as opposed to physical assets.

About the facilitators

Richard Paterson

PricewaterhouseCoopers



Mr. Richard D. Paterson, based in Houston, is PwC's Global Energy, Utilities and Mining Leader, and Market Managing Partner for the Greater Houston market. In over thirty-three years with the firm, Rich has served in several leadership positions and a broad range of multinational and domestic clients in seven different offices. Mr. Paterson recently completed a 5 year assignment as the Lead Global Engagement Partner for ExxonMobil Corporation. From 1997 to 2001, Mr. Paterson led the firm's energy practice in Central and Eastern Europe. He resided in Moscow during this period. Rich has worked exclusively in the energy industry. Mr. Paterson's clients have included ExxonMobil, Chevron, Gazprom, Battle Mountain Gold and other large oil and gas and mining companies. His experience spans upstream, downstream, midstream, mining and venture companies. He has also served as leader of the human resource planning function for the global energy practice, which included partner admissions, overseas assignments, career development programs and continuing education. Mr. Paterson is a CPA in the states of Texas, California and Michigan. Mr. Paterson is also a member of AICPA and TSCPA, as well as affiliate organizations in Michigan, California and Texas.

Charles Wheeler

PricewaterhouseCoopers



Charles Wheeler is a Principal of the HR Services consulting practice of PricewaterhouseCoopers LLP specializing in executive and incentive compensation for public and private companies.

Mr. Wheeler has significant experience, both as a lawyer and a consultant, in designing executive compensation strategies and programs, including: facilitating boards of directors and/or executives in developing compensation strategies to integrate with the company's business strategies; coordinating base salaries, long-term and short-term incentive plans and retirement plans to be market competitive and to implement the company's compensation strategy; designing stock and cash incentive plans to drive financial and operational performance; training directors and executives in goal setting and performance evaluation techniques; and advising boards of directors and/or executives of the taxation and accounting implications of compensation plans (including the FASB's APB 25, FAS 123 and FAS 123R accounting rules for stock-based compensation plans) and assisting them in satisfying their Sarbanes-related obligations.

Mary Bass
Spencer Stuart



Mary Bass's search practice focuses on board, CEO/COO, and their direct reports for growth companies nationwide. She is a member of the firm's Boards Practice, a leader in the Private Equity Specialty Practice, and active in the firm's Energy, Financial Services, Industrial & Life Sciences practices at Spencer Stuart. Mary enjoys working with companies that are going through change. She has worked extensively with several prominent private equity groups (e.g., First Reserve, Texas Growth Fund, Vestor Partners, Cornerstone Ventures, Saw Mill Capital and Jordan Company), helping them recruit CEOs/COOs and CFOs for their portfolio companies and experienced investment professionals for their firms.

Prior to joining Spencer Stuart, Mary had 16 years of direct investing experience with Triad Ventures, one of the leading private equity groups in Texas. Her experience working with emerging growth companies spans several industries (life sciences, telecommunications, distribution, software, specialty retail and consumer). As a venture capitalist, she participated at the board level to help build the management teams necessary to take companies public.



3

Energy Board Roundtable Viewpoints: Foreign Corrupt Practices Act

The second energy board roundtable was held on October 2, 2008, and featured a discussion about compliance with and investigations of the Foreign Corrupt Practices Act.

Background

The Foreign Corrupt Practices Act (FCPA)—enacted by Congress in 1977 following a number of well-publicized corruption scandals—was designed to eliminate illegal or unethical payments to foreign government officials and restore the public’s confidence in American business. For nearly three decades, the Department of Justice (DOJ) and the Securities and Exchange Commission (SEC) prosecuted just a handful of cases annually.

In recent years, however, the DOJ—often working with other foreign regulators in other countries—has significantly ramped up efforts to investigate and prosecute FCPA violators, both corporate and individual. This increased focus on the enforcement of anti-corruption legislation has resulted in a significant increase in joint coordination and

prosecution with the DOJ. In addition to increased numbers of cases, the severity of punishment has risen. Punishment can include prison sentences, disgorgement of profits, and collateral civil actions instituted by the SEC. Civil actions often call for the imposition of monitors.

These trends have elevated the issue of FCPA compliance and prevention to the boardroom level.

The PricewaterhouseCoopers (PwC) Energy Board Roundtable—held in Houston on October 2, 2008—provided insight into the changing nature of FCPA enforcement and how energy companies are responding. In addition to members of the Energy Board Network, the session included a number of subject matter specialists from PwC.

Discussion highlights

“FCPA has become a major issue for US companies that operate globally. There is no doubt that enforcement—and punishment—is on the upswing.”

The US federal government opened 84 FCPA investigations in 2007, compared to just three in 2002. Prosecutions are increasing too, with 15 in 2006 and 38 in 2007. As of mid-year 2008, there were already 16 prosecutions on the books—the highest number ever in the first six months of a year.

In addition to increased vigilance, the DOJ and SEC are seeking more severe penalties for those involved, including jail terms for individuals and disgorgement of profits. For example, an oilfield services firm recently agreed to pay the largest FCPA penalty on record for an energy company—for improper business activities. And in a case involving another oilfield services firm, the executive involved is facing up to seven years imprisonment and fines totaling more than \$10 million.

These penalties could be dwarfed by those facing a major global technology firm that is expected to be in the range of \$1 billion, for a settlement involving a number of foreign governments.

These very public cases are also spawning related civil litigation,

including securities fraud actions and lawsuits from shareholders, foreign governments, business partners, and agents.

“The energy industry seems to be a top target of the Department of Justice. Is this perception accurate?”

The energy industry’s global activities are very visible to the DOJ and the SEC, for a number of reasons. First, energy companies do business in markets that are considered to be at the highest risk for bribery and corruption. Second, energy companies often utilize foreign agents or consultants who handle a number of “on-the-ground” transactions, increasing the risk of illegal activity. Third, there is a history of energy companies enacting policies and procedures to prevent violations of the FCPA, but not necessarily ensuring that they are followed to the letter everywhere the company does business. In other words, employees may have received information about the FCPA and perhaps even signed an agreement that all laws would be followed. But unless the company is specific in its training and rigorous in its enforcement, day-to-day activities sometimes fall short of compliance.

And finally, there is a form of “guilt by association” at play. As federal prosecutors find evidence of wrongdoing at companies within

Note: The largest FCPA-related fine is \$800 million imposed on a German engineering company.

the industry, this strengthens the impression that competitors could be involved in illegal activities, as well.

“Compliance is a multi-faceted issue that can be difficult and expensive. But the alternative is even worse.”

Energy companies must implement stringent training and communication programs that ensure applicable staff have in-depth knowledge of FCPA:

- Companies must institute structured policies and procedures that spell out—in detail—how business is to be conducted to maintain proper business conduct and compliance.
- A FCPA compliance team—comprising of general counsel, internal audit and the in-house ethics/compliance officer—should routinely audit and evaluate the company’s activities and records.
- Compliance with FCPA should be part of every employee’s annual performance evaluation.

Most employees want to comply with FCPA, but at companies where business expectations are not clearly evident or aligned with the realities of individual markets, mistakes can be made. It is critical that board members and senior management understand the pressure that

unrealistic expectations can place on employees who find themselves balanced between meeting corporate goals and maintaining compliance with federal laws. Only management can embed the importance of FCPA compliance into the culture of the company. To be successful this requires a realistic understanding of what is allowed—and what is expected in certain countries.

The reality is that some countries might not be suitable for business opportunities, and management must be aware of that fact.

“How do companies manage the cost of investigations? The investigations are lengthy and are extremely costly.”

Typically, 80% of the necessary information is found in the first stages of an investigation. Unfortunately, the remaining 20% of facts can take much longer to uncover. A best practice today is to quickly conduct the investigation and commence initial discussions with the prosecutors, as soon as the majority of the facts are known.

Prosecutors should also be briefed about how information was gathered and what the processes are to identify and prevent potential violations. The facts from an investigation are important to expeditiously bring the investigation to closure along with illustration of how the investigation

was conducted. This also serves to assist a business unit in evaluating its business practices.

“Business consultants in foreign markets—‘They are you’”

The FCPA statutes were written broadly, and therefore require analysis and interpretation. For example, what does the law mean by a “US person?” What exactly constitutes a “foreign government official?” How do you define “something of value?”

This vagueness should not be interpreted as flexibility—the reality is just the opposite. Companies need to take the most disciplined and consistent approach to their business practices to ensure that they are in compliance.

For example, one of the biggest issues facing US companies is the use of foreign business consultants or sales agents. These individuals or businesses represent the US-based companies that hire them and their actions are covered under the FCPA. Thus, companies need to prudently screen any potential business consultant and make certain that they understand where the company’s funds are going and how they are being used.

As the saying goes, “They are you ... and their actions are your actions.” If agents or consultants make illegal payments—even without the

client’s knowledge or approval—it is a violation of the FCPA and the company may be liable.

“It can be difficult to audit third-party consultants or agents, but it is necessary for compliance.”

Energy companies doing business in foreign countries must conduct regular reviews of third-party agents. Right-to-audit clauses should be written into the contract and should be carried out periodically. If the agent is uncooperative, it is time to find a new one.

Reviews can include discussions with the agent’s employees, field visits, on-site inspection of records, including an analysis of invoices that the agent has paid on the sponsoring company’s behalf. Energy companies should focus keenly on high-risk countries and be proactive in monitoring agent activities. There must be a detailed paper trail; companies should do what is reasonable and practical to review and assess the business operations of their agents and maintain records to prove that there is a rigorous and sustained compliance initiative.

Companies should also be aware of potential “red flags”—such as requests to wire money to a different country than where business is conducted—and investigate each concern thoroughly.

“Many internal auditors view bribes with a US-centric point of view. But a \$400 payment to an individual in Angola represents twice the average annual salary.”

Without proper training, accounts payable staff and internal auditors may not be able to recognize a small item on a shipping invoice, for example, that could represent a customs bribe. Any small payment made in a high-risk country with a low standard of living could be an issue.

Companies that are looking solely for million-dollar payouts may be missing a wide range of potential FCPA violations. That is exactly what unscrupulous agents and shippers are counting on. In response, some companies are turning to FCPA compliance control audits that are conducted by specialists with detailed knowledge and experience in reviewing invoices and other documents to identify potential violations.

“The FCPA is becoming a major issue in acquisitions of foreign companies. It does not matter if it is an asset or stock acquisition. If you buy the company, you may have bought any problems they may have.”

Many energy companies interested in companies with foreign operations are expanding their due diligence efforts dramatically in an attempt to

uncover potential FCPA violations prior to closing. It is no longer enough to study financial statements—some underlying transactions that violate FCPA regulations are small dollar. Attorneys and forensic accounting and compliance experts are looking at agent relationships, distributor agreements, banking relationships—anything that can provide a clearer picture of the target company’s past activities and possible problems.

The key area of focus should be acquisitions in countries where corrupt business practices are commonplace. In those instances, companies must identify the local agents and banks being used by the acquisition target. Are these agents reputable? Do they understand and follow FCPA in their other dealings? What are their technical qualifications? What are their reputations with the US Embassy or Consulate?

It is also necessary to understand the target company’s sales cycle and go-to-market model. What structure did the company use? Were consultants, distributors or other third-parties involved in their sales efforts? If so, what was their role? A distributor could be making illegal payments to win business by funneling money through yet another vendor—and the responsibility and potential liability still lies with the US company or a foreign registrant.

This increased focus on FCPA-based due diligence is making it more common for companies subject to the FCPA to walk away from transactions. In addition, some companies are handling potentially risky assets in an acquisition by carving out those assets that may be tainted by ethics violations or bribery.

When a foreign acquisition closes, it is critical for acquiring companies to implement a rigorous compliance program in the newly acquired company, beginning on Day 1. The program should include:

- Clear and consistent tone from the top
- Training
- Due diligence updates on third party relationships
- Clearly articulated and widely communicated anti-corruption and ethics policies
- Establishment of an employee hot line for ethics questions or concerns
- Swift investigation of any violations

In addition, the acquiring company's management team, compliance group and general counsel should immediately be inserted into all significant business decisions of the acquired company.

It is important to remember that in the event of wrong-doing, it is the value of the contract or business gained

that is subject to disgorgement of profits. A \$400 bribe might lead to the disgorgement of profit on a \$35 million contract.

“The increase in enforcement of FCPA is having an impact on boards and their areas of focus. For example, our audit committee is spending less time on Sarbanes-Oxley compliance and more on FCPA. And it has us rethinking where we want to do business.”

Roundtable participants agreed that audit committees, in particular, were being refocused to handle FCPA compliance, and at some companies, the responsibility was spreading to the entire board. Board members are increasingly asking for training on FCPA and are requiring management to share country-by-country plans for achieving compliance. Some boards are requiring that the company's FCPA experts—general counsel, internal audit and compliance leader—report directly to the audit committee on a regular basis. In turn, management teams are investing significant resources on compliance, adding legal and accounting staff, conducting additional audits and stepping up training and communications.

In the long run, participants confirmed, the importance of sustaining an effective risk-based business model including FCPA compliance elements.

About the facilitators

Manny Alas

PricewaterhouseCoopers



Manny A. Alas is a Partner in the New York office of PricewaterhouseCoopers LLP. He is the New York Forensic Services Practice leader and the Co-Leader of the Global FCPA Investigations and Forensic Services practice.

His area of expertise is FCPA which includes investigations, compliance, controls, pre and post merger due diligence and training programs, as well as fraud investigations and forensic accounting. He has led significant international and domestic investigations covering such areas as: accounting fraud, asset diversion, foreign corrupt practices, money laundering and Ponzi schemes. He assists clients and law firms with DOJ and SEC investigations.

His FCPA, forensic accounting, mergers & acquisitions and compliance experience include: Aerospace, Automotive, Consumer and Industrial Products, Energy, Financial Services, Technology, Not-for-Profit, Sports, Entertainment, Insurance and Agriculture.

Mr. Alas is a CPA, and has over 26 years of public accounting experience. He is a frequent speaker at Anti-corruption and FCPA conferences.

Michael Collier

PricewaterhouseCoopers



Michael Collier has over 22 years of professional experience; the last nine focusing solely on advising clients on mergers and acquisitions, due diligence, transaction structuring/strategy, financial modeling and analysis, closing support, post-deal integration, and divestiture support.

Mr. Collier holds an MBA from the University of Texas at Austin and is a Certified Public Accountant. Before joining PwC, Mr. Collier worked for Exxon Corporation in Houston and was the CFO of a small public company in Austin, Texas.

In the mid 1990s, Mr. Collier was selected to service as Executive Assistant to PwC's Global Chairman where he worked in Global Strategy and Planning.

Mr. Collier returned to Houston in 1997 to help launch the firm's merger and acquisition practice. He has lead numerous global transaction engagements for clients across the energy industry.

Dale Jensen

PricewaterhouseCoopers



Dale Jensen leads the Forensic Services practice in the Houston office and has more than 30 years of experience in providing dispute analysis and financial investigation services, audit and accounting services, internal control and management reviews, cost accounting analyses, and other financial analyses. He has been accredited as an expert, and has testified on accounting and financial matters in Federal and state courts.

Mr. Jensen has extensive financial investigations experience, including investigations related to: stock option granting procedures and the appropriate accounting for such grants; whistleblower claims under the False Claims Act; Foreign Corrupt Practices Act claims; misappropriation and mismanagement of assets; and other matters. In addition to his investigations experience, he has extensive experience in other dispute areas, including antitrust allegations, breach of contract, Ponzi schemes, director and officer liability lawsuits, environmental claims, and securities fraud.

He is a Certified Public Accountant licensed in the State of Colorado. He is a member of the American Institute of CPAs, a member of the Colorado Society of CPAs, and an associate member of the American Bar Association Section of Litigation and Section of Environment, Energy, and Resources. Mr. Jensen received a Bachelor of Science degree in accounting from the University of Denver, and earned the Silver Medal Award for the highest grades in the State of Colorado on the May 1978 CPA Examination.



4

Energy Board Roundtable Viewpoints: US Energy Policy

The third energy board roundtable was held on October 30, 2008, and featured a discussion on US energy policy.

Background

Forming effective US energy policy is both critical and difficult to accomplish in our political system. In addition, US energy policy must address challenges at home and abroad. With energy demands escalating globally in developing countries like China, the United States needs to develop energy policy that meets the needs of future generations. Global energy needs are forecasted to grow by 50 percent in 25 years, according to the International Energy Outlook 2008. Understanding the realities of the energy industry will encourage energy policy that promotes real solutions, rather than sound bites.

The PricewaterhouseCoopers (PwC) Energy Board Roundtable—held in Sonoma, California on October 30, 2008—provided insight from PwC’s panel of facilitators and participating energy board members into the challenges of meeting future energy demands, and the need for a thought-out US energy policy to support the energy industry in providing ample reliable energy.

“I’m very concerned that the bad energy policy of the 1970s could be returning.”

It is critical that the public understand the energy industry if the United States is to move in a positive direction towards developing sound energy policy, instead of backwards

into the mistakes of the past. In the 1970s, when the US government tried allocation controls, price controls and the windfall tax that ended with President Nixon, the price of oil went up, rather than down.

“Because people do not understand basic information about the energy industry, they tell politicians to do something incorrect.”

The public thinks oil companies are to blame for high oil prices, because consumers do not know what makes up the price of a barrel of oil. Consequently they tell politicians to fix things by taxing the oil industry, passing price gouging legislation, attacking speculators and breaking up mergers.

The reality is that many factors affect the price of gasoline. The price of crude is set on global markets, and the government takes nearly twice as much in taxes (13 cents) as the industry makes in profit (fewer than eight cents). Only 20 percent of consumers surveyed in a recent IQ energy quiz knew that federal, state and local taxes accounted for up to 15 percent of the gasoline prices at the pump in 2008, reported Harris Interactive.

Another misconception fueling Washington is the belief that alternative energy is the silver bullet to ‘energy

independence,’ and that government should drain money from the oil industry to fuel alternative energies.

“What many consumers do not know is that alternative energy sources primarily power electricity. Unless we are fueling a fleet of alternative vehicles, alternative energy as a replacement to oil does not make much sense, outside of ethanol, and that has a ceiling on supply.”

Especially as electricity prices escalate, alternative energy will remain a necessary piece to meeting the energy needs of the United States, as consumers will continue to need vast amounts of oil, coal and nuclear power. Brazil is not ‘energy independent,’ because of ethanol, but because of oil.

Our energy policy must distinguish between ‘energy independence’ and energy security. Where ‘energy independence’ is unrealistic in today’s global market, energy security is attainable by expanding and diversifying domestic energy supplies, and increasing global energy investment.

“The biggest hope for our industry is to get customers speaking. If our customers are asking for things—like off-shore drilling—this is a lot more credible. They are the people politicians listen to.”

Energy companies must get better at educating the public about the energy industry. We need to be careful that the next era of US energy policy eases the problems, instead of further compounding them.

“A crisis is a terrible thing to waste.”

Today’s economic downturn crystallizes the critical state of the future energy needs of the world, and the need to address the challenges with long-term energy policy. The American people need to take this opportunity to prepare for the future by shifting energy policy to encourage:

- More energy efficiency,
- Significant global investment in the energy industry,
- More access to US resources,
- More innovation and energy diversification, and
- Addressing the enormous challenge of carbon dioxide (CO₂) reduction.

“Supply and demand still govern this industry.”

While excess supply by non-OPEC members in the ’80s drove the price of oil per barrel down, the increase in demand by developing Asia since the early 2000s has driven the price

Significant, long-term global investment

up. For example, the number of cars in China doubled between 2000 and 2006. While new technology and alternative fuels will help support economic activity in the future, fossil fuels will be indispensable for decades, and oil demand will remain high. The developing world will continue to drive demand, and require a lot of new infrastructure.

Massive energy investment is needed on a global level to meet the global needs. The approximate price tag is \$22 trillion dollars in energy investment to meet projected global demand in 2030.

Decisions made by national oil companies will propel the global energy layout of the future more than US oil companies. Sovereign states, and their national oil companies, own most of the oil and gas reserves that

consumers need. Some 93 percent of the proven oil and gas reserves are owned by national oil companies, not international oil companies such as Chevron or ExxonMobil, according to Petroleum Intelligence Weekly's ranking.

“Any international, political issues can cause our spare oil capacity to drop even further. We still have a tiny surplus capacity, and unless we continue to invest, the price of oil is going to remain high. With 10 to 15 year projects, energy companies must keep their eye on the long term. Obviously in the short term crisis, this issue has diminished dramatically, but without significant action it will return.

Access

“How can we expect other countries to grant us access when we will not fully use the resources we have in our country?”

North America is one of the richest resource areas in the world, yet a lot of it remains off limits. Significant policy changes are involved in getting access to these fossil fuels, and this access will become increasingly important to meeting the energy needs of the American people.

While Congress lifted a drilling moratorium for both the Atlantic and Pacific coasts in September 2008, a drilling ban in waters within 125 miles of Florida’s western coast remains in force. Further, the Arctic National Wildlife Refuge (ANWR) in northeast Alaska remains a lightning

rod in Washington. With modern technology, we can explore and if we find anything develop it without any material impact on the environment of this wildlife refuge.

“We are arguing about stuff we just do not know. The American people do not know about the prospective of their own resources. A seismic survey would disclose what is prospective and what is not. Then we can decide what to do about it.”

The United States has not done a survey of off-shore resources. The resources in the deep gulf water could be 5 to 6 times as much as estimates, but until modern seismic technology is applied it is really unknown.

Innovation & energy diversification

The world is not running out of resources, they are just harder to get to using conventional methods. To meet these challenges energy companies must expand all economic energy sources, including clean coal, nuclear, renewable and unconventional oil and natural gas. Advancing these sources requires human ingenuity.

“There is more we can do with the fossil fuels. Let’s find out how to make them work for us. But, we have to start working on this now, because of the development time line and we must deal with the significant cost.”

In Australia, Chevron just started what will become the largest CO₂ sequestration project in the world. Innovation takes time, money and the right skills. The US has significant coal resources but most mining companies do not have the balance sheets to take on carbon sequestration projects to make coal more viable. Innovation in all aspects of the energy industry is necessary.

“I’m not trying to advocate higher prices, but higher prices do drive innovation. The clean-air policy drove a lot of innovation.”

Meeting the CO₂ challenge

Addressing carbon constraints is a necessary, but expensive endeavor.

Reducing CO₂ will have a huge price tag, and the economic impact will be significant.

In addition, there needs to be some reality to how much CO₂ can be curtailed. If all transportation in the world stopped, we would reduce CO₂ emissions by only 15 percent. Yet the political talk during campaign season was much more drastic with candidates calling for reductions between 50% and 80% by 2030.

A defined system that is equitable across the board is vital. Companies need to understand the goals and the costs in order to effectively move forward.

Energy efficiency

“The one thing that scares me is that as the price of oil drops off, people are returning to business as usual. If we do not work towards meaningful solutions now, the energy spikes in the future will continue to increase in severity.”

The biggest energy producing country in the world is not Russia, nor Saudi Arabia. It is the United States which is the largest producer of ethanol and nuclear power, the second largest producer of natural gas, coal and wind power, and third largest producer of oil. However, the US uses so much oil and natural gas, that it requires significant imports. We need to become drastically more efficient. Energy efficiency is more advanced in Europe and Japan than in the US. All of us, particularly the US, must continue to grow more energy efficient.

“What are some of the challenges abroad President Obama will inherit that will affect US energy policy?”

President Obama will have to deal with some hard realities and will face tough choices.

The global economic crisis and a range of political hot spots will sharply limit his options on several key security

challenges—and on energy policy. Internationally, politics will continue to play a large role in energy markets and in growth in oil production, as it has in Russia and Venezuela. Too often, the global market dominance of national oil companies ensures that policy decision-making rests with political bureaucrats rather than energy experts.

Iraq, with the third-largest oil reserves in the world, will pose one of the largest conundrums as President Obama aims to withdraw US combat troops.

The leadership of the Chinese Communist Party faces a broad range of challenges as its economy grows. China is the world's second largest energy producer and the second largest consumer behind the United States, and hydrocarbon demand and imports will continue to grow for the foreseeable future. In addition, as the number of internet users in China surges, despite the sophisticated system of filters and re-routers that the government has put in place, the Chinese leadership has discovered that public policy must become more responsive to public opinion. Another challenge: the economic slowdown has already triggered the failure of 10,000 Chinese manufacturers, intensifying pressure on the government to delay

efforts to boost domestic consumption as the engine for growth and to protect Chinese exporters. This will increase tensions between Beijing and Washington as China slows the appreciation of its currency

Iran's nuclear program continues to grow, and sanctions have failed to slow its progress. Yet, as long as oil prices remain below \$60, the Iranian economy will come under increasing strain, and US and European hopes that sanctions can be effective will remain.

As long as the United States maintains a significant presence in the Persian Gulf region, and as long as Iran continues to enrich uranium, there is a risk of confrontation. It's not in the Iranian government's interest to back away from the nuclear program, its most reliable source of popularity at home.

The United States will also need Russia, the world's number one natural gas supplier and number two oil producer, to help contain Iran's nuclear development and related threats of nuclear proliferation. Yet anti-American sentiment in Russia will complicate President Obama's efforts to improve a bilateral relationship that is already at its lowest levels since the end of the Cold War.

“What does Russia drilling in the Arctic need from US companies that they cannot get from other non-US countries?”

Russia has not developed an exploratory project for 20 years. It does not need US technology per se, but it does need our experience and 'know how' at managing complex projects in all these dimensions including promoting community awareness. There are 3.9 million oil wells drilled in the world, and 2.9 million are in the United States. No other country has that type of experience.

Chevron just extended its contracts in the partitioned neutral zone between Saudi Arabia and Kuwait where there are large amounts of heavy oil. Developing this heavy oil is extremely complex. It is more about the years of experience US companies bring, rather than the newest drilling tool, or pump. The Arctic area faces similar challenges.

National oil companies are broadening and enhancing their operations and skills, but they currently have very specific expertise. Right now—they do not know how to do some complex projects like IOC's do.

“Do you see more taxes on energy?”

Political logic will likely conclude that an increase in the gas tax will encourage consumers to drive less and produce less carbon. As Washington seeks funds to make investments in new technology and alternative energy, it is our task to be sure it does not get it all from one place, but gets it fairly. The wind-fall tax will only reduce production.

Fair, broad-based tax increases are acceptable. I’m against oil companies paying for the ills of America. If there has to be a tax, our choice is carbon tax. It’s fair, and everyone pays.

“What are some real train wrecks that could be heading our way?”

First, the fourth quarter is likely to go very bad as crude and natural gas prices continue to drop. With companies releasing year end results which will look good, despite the fourth quarter, a week after inauguration, expect a mass villainization of the industry.

Second, the Farmer’s Almanac is forecasting a bitter winter. And since people pay for natural gas after they use it, expect an unexpected hit to consumers’ wallets from escalating energy bills.

Lastly, the American people will begin to experience the widening gulf between “on the trail” political assertions rampant during the campaign season and reality. All the proposed programs asserted by both political parties during the fall cost a great deal of money. And while Washington is very good at spinning things, it is clear that the passage of these new economic solutions will cost the disappearance of many tax breaks, including those in the energy sector.

What is the consensus?

Energy is a geopolitical business. The biggest issues are above the ground rather than below the ground. Politics is everything.

In today’s shifting economic market, the American people have an opportunity to move US energy policy towards positive change. To secure a more reliable energy future, the United States must develop a broad, long-term energy policy that addresses industry hurdles and the geopolitical landscape. It must balance providing security and economic, environmentally responsible energy sources. Concerted effort must be taken now to ensure that the next era of energy policy encourages US energy security, access to US resources, energy efficiency, innovation, energy diversification, CO₂ reduction, and massive global investment in the energy industry.

About the facilitators

Richard D. Paterson
Global Energy Leader,
PricewaterhouseCoopers



Mr. Richard D. Paterson, based in Houston, is PwC's Global Energy, Utilities and Mining Leader, and Market Managing Partner for the Greater Houston market. In over thirty-three years with the firm, Rich has served in several leadership positions and a broad range of multinational and domestic clients in seven different offices. Mr. Paterson recently completed a five-year assignment as the Lead Global Engagement Partner for ExxonMobil Corporation. From 1997 to 2001, Mr. Paterson led the firm's energy practice in Central and Eastern Europe. He resided in Moscow during this period.

Rich has worked exclusively in the energy industry. Mr. Paterson's clients have included ExxonMobil, Chevron, Gazprom, Battle Mountain Gold and other large oil and gas and mining companies. His experience spans upstream, downstream, midstream, mining and venture companies. He has also served as leader of the human resource planning function for the global energy practice, which included partner admissions, overseas assignments, career development programs and continuing education. Mr. Paterson is a CPA in the states of Texas, California and Michigan. Mr. Paterson is also a member of AICPA and TSCPA, as well as affiliate organizations in Michigan, California and Texas.

Peter Robertson
Vice Chairman,
Chevron Corporation



Mr. Peter Robertson is vice chairman of the board of directors for Chevron Corporation—a position he has occupied since January 1, 2002. Since becoming vice chairman, he has had a wide variety of responsibilities including direction of the company’s worldwide exploration, production and global gas businesses; corporate strategic planning; policy, government and public affairs; corporate human resources; security; and compliance. He collaborates closely with the chairman in overseeing the strategies and operations of the company.

Mr. Robertson is a native of Edinburgh, Scotland. He earned a bachelor’s degree in mechanical engineering at Edinburgh University, and he holds a master’s degree in business administration from the University of Pennsylvania, Wharton School of Business, where he attended as a Thouron Scholar.

He joined Unocal in 1971 and Chevron in 1973. Between 1973 and 1991, he worked in the United Kingdom and the United States in positions of increasing responsibility in the company’s finance organization. In October 1989, he was elected vice president of finance for Chevron U.S.A. Inc. In October 1991, he was named president of Warren Petroleum Co., Chevron’s former natural gas liquids subsidiary, headquartered in Tulsa, Okla. On Sept. 1, 1994, he was elected a vice president of Chevron Corporation, responsible for strategic planning.

In March 1997, Mr. Robertson was elected president of CUSA and a vice president of Chevron Corporation, responsible for Chevron’s North American exploration and production operations. In January 2000, he was named president of Chevron Overseas Petroleum Inc. (COPI). At COPI, he was responsible for directing Chevron’s oil exploration and production activities around the world.

Mr. Robertson is a director of the United Way of the Bay Area, the US-Russia Business Council, Resources for the Future, and the American Petroleum Institute. He is past chairman of the US Energy Association, co-chairman of the US-Saudi Arabian Business Council, vice chairman of the Leon H. Sullivan Foundation, vice chairman of the board for the International House Berkeley, and serves on the Corporate Advisory Board of the Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria. He also is past director of Sasol Chevron Holdings Ltd., Dynegy Inc. and Caltex Petroleum Corp.

John Felmy
Chief Economist,
American Petroleum Institute



Mr. John Felmy is Chief Economist of API. He is responsible for overseeing economic, statistical and policy analysis of the Institute. He has over twenty-five years experience in energy, economic and environmental analysis. He received Bachelors and Masters in Economics from The Pennsylvania State University and a Ph.D. in Economics from The University of Maryland.

Mr. Felmy is a member of several professional associations including the American Economics Association and the International Association for Energy Economics

Willis Sparks
Political Risk Analyst,
Eurasia Group



Mr. Willis Sparks is an analyst at Eurasia Group focusing on global macro issues, particularly transnational risk issues and US politics. He holds a master's degree from Columbia University's School of International and Public Affairs, where he specialized in international security policy and the study of the former Soviet Union. He also earned a master's degree in international relations from the Institut d'Etudes Politiques (Sciences Po) in Paris. Mr. Sparks holds two bachelor's degrees from Brown University and is a graduate of the Juilliard School. Mr. Sparks joined the Eurasia Group in 2005 from the Council on Foreign Relations, where he wrote on terrorism and US national security.



5

Energy Board Roundtable Viewpoints: Financial Crisis

The fourth energy board roundtable was held on January 26, 2009, and featured a discussion on the financial crisis.

Background

The global credit crisis that began in 2008 continues to impact the energy industry and is likely to do so for the foreseeable future. The crisis was triggered by substantial loan losses due to declines in mortgage-backed securities that created uncertainty among financial institutions—causing them to eliminate or reduce lending to one another and to public and private companies, and helping to push the US into a recession.

To date, the US government's Troubled Assets Relief Plan (TARP) has not stimulated banks to resume traditional lending practices. This dramatic reduction in access to capital is now being driven by banks' concern over

the global economic climate and their focus on striking a balance between long-term business goals, protecting their shareholders and acting with prudence, and stimulating the economy. The results of this impasse are widespread and deep.

The PricewaterhouseCoopers Energy Board Network Roundtable—held in Houston on January 26, 2009—provided an overview of the current economic landscape and insight into how energy companies are responding. The session included members of the Energy Board Network and subject matter experts from PricewaterhouseCoopers. An overview of the roundtable's dialogue follows.

Discussion highlights

“What are some of the industry issues we are seeing as a result of the credit crisis?”

The energy industry’s initial reaction to the credit crisis and the overall slowdown in economic activity has been fairly consistent across sectors. Capital budgets for 2009, 2010 and even 2011 have been reduced, due to an uncertain price environment, expected lower demand and the rising cost of both debt and equity capital, where available.

In addition, mergers and acquisitions have slowed considerably, although some anticipate that a general thawing of M&A activity will take place in the last half of 2009, starting first with the formation of joint ventures and sales of specific assets.

“The key for energy companies today is to first understand: ‘What are we trying to manage for?’ Some are in a weak or uncertain position, others are strong with an eye toward taking advantage of current market conditions for growth.”

Companies that are facing an uncertain future must critically evaluate their expected financial performance over

the next 12-18 months and determine whether they are managing for growth, income, market share, cash flow or other metrics.

This in-depth analysis should include an extensive overview of risk management issues and potential contingency plans. Management should be providing board members with the widest possible range of scenarios involving various risks—supply chain disruption, higher levels of unemployment that could impact demand, inability to refinance debt or call upon lines of credit and more.

The ongoing review should also include detailed due diligence on the financial standing of both customers and suppliers. Revenue opportunities that look attractive on the surface, for example, can be hampered if the customer cannot get financing or is struggling to pay its bills, or if suppliers go under suddenly or cannot meet obligations.

Underpinning these ongoing risk management efforts must be accurate, high-quality data and an organizational structure that is designed to make good decisions and implement them quickly and efficiently.

Finally, board members need to focus not just on the strategic direction for the company, but also on the general business issues and trends, especially given the fast-changing nature of the credit crisis and the government's response. Leaders must be cautious not to bury themselves in technical details and miss broader themes that may impact the energy industry and their companies.

“The importance of liquidity cannot be overstated.”

Companies should have regular “early warning” discussions, with an eye toward recognizing cash flow risks. Does the company have adequate sources of liquidity or resources that can be used if necessary, such as unused lines of credit, assets that can be quickly sold or cash in the bank? Simply put, how does the company generate cash and pay its bills? What spending is discretionary and what is not? What loan covenants are the company currently operating under, and what happens if those covenants are not met?

Exploration and production companies face another liquidity issue, since borrowing is typically based on the

value of reserves. Given that significant commodity price declines have reduced reserves value, boards should be aware of how their company's borrowing base has changed.

In addition to planning for these scenarios, companies should also be prepared to disclose the risks to cash flow in public filings. Energy firms that have credit facilities coming due should be having discussions now with their banks to ensure a smooth renegotiation process.

“Regulatory agencies are under significant pressure due to the very public nature of the credit crisis. The public is asking, ‘What are you doing to help fix this mess?’”

In this era of increased awareness of corporate transparency, federal regulators are extremely focused on what companies are telling Wall Street and the investing public about their financial solvency.

Potential issues associated with this deteriorating market such as potential goodwill and other types of impairment, fair value considerations and other financing concerns in illiquid markets should be disclosed in advance of this adverse occurrence, and great care should be taken to ensure that the information communicated is accurate and timely.

With so many companies struggling during what could be a prolonged downturn, a major issue many are facing centers on “going concern” considerations. Do companies have enough cash on hand and other sources of liquidity to survive for the next 12 months? Have they provided appropriate guidance about the risks involved with their business? What might happen in a continued downturn in the credit markets that might prohibit the company from sources of liquidity?

Board members need to understand the business and financial issues that may impact their company and make certain they are asking in-depth questions of management. In the end, however, the route to recovery will depend on management teams making proper decisions manage these difficult market conditions. Boards that have a collaborative relationship with management—that can ask for information and push back when necessary, but that ultimately trust in their leaders—will succeed.

“There was a similar issue back in the 1980s, when banking and energy underwent a crisis in the US. What did we learn?”

The biggest lesson for the energy industry was that its rapid contraction had serious consequences in future years. The massive headcount reduction in response to falling commodity prices represented a significant talent drain from the industry, and subsequently reduced the number of college students pursuing degrees in fields such as geology and petroleum engineering. That led to shortages of skilled employees that still impact energy companies today.

The consensus now appears to be that many companies reacted too quickly and only considered the short-term cost of maintaining key employees. Today, many companies are taking a more measured approach—looking first to reduce capital spends and maintaining key staff by moving them to longer-term projects.

From the banking perspective, there were fundamental differences between the 1980s and today. Transaction complexity is much greater, the pressure to produce high returns is maximized and the industry’s comfort level with risk is higher, at least until late 2008.

The recovery is expected to be a slow process, not a fast fix, so it remains to be seen what lessons financial institutions learn or how they are regulated in the future.

“With so much volatility in the market, how are boards handling risk management and other issues?”

Many audit committees are now considering how best to monitor risk management. Some believe it should be a full board responsibility. Others are setting up separate committees designed to look broadly at all forms of risk—political risk, compliance risk and more.

For some companies, the process is starting with the development of a mission statement that outlines the role and responsibilities of both the committee and the risk management function.

Participants in the roundtable discussed a number of other board initiatives, such as looking for more scenario-planning from management; in-depth studies of counter-party risk; increased frequency of board meetings and board visits to the field; and increased activity among board committees.

“The SEC’s recent changes to reserves guidelines, while not related to the credit crisis, are important and may impact the way boards work.”

New reserves guidelines give energy companies more latitude in reporting reserves, in exchange for increased disclosures as to how those estimates are determined.

Some boards of directors may determine that a formal reserves committee may be necessary to oversee this process, especially if audit committee members are already stretched thin due to other responsibilities. If this is the case, it is important that the reserves committee maintain independence but that committee members remember not to overstep their role and begin to manage the actual numbers. The focus should be on monitoring the process and ensuring that the proper questions are being asked.

Other companies may decide that the audit committee has the capacity and experience to oversee reserves reporting. In either case, it is important that the committee serve as a conduit between company and third-party engineers and the full board, to

ensure that every board member is aware of the estimating process and its impact on company strategy.

“Right now, it is too early to determine what we can expect from Washington, D.C., in the coming months”

The SEC’s recent focus on issues such as IFRS and XBRL has been overshadowed by the meltdown on the financial services sector and the resulting economic recession. It remains to be seen what tone and approach the SEC will take with regard to regulatory enforcement, as well as the level of interaction it will have with other agencies worldwide. It is also

unclear whether the current market environment will cause a slowdown in the transition to IFRS, or whether the belief will be that US companies can compete more effectively with globally accepted accounting standards.

Roundtable participants agreed that engagement with the government and the new administration is critical. Companies must be persistent in making recommendations to regulatory agencies and Congress, and communicate their point of view. One energy company, for example, recently conducted its board meeting in Washington, D.C., in order to be closer to those in power.

About the facilitators

Bob Moritz

PricewaterhouseCoopers



Mr. Bob Moritz leads PricewaterhouseCoopers' Assurance Services practice, providing clients expert assistance as they address their audit, assurance and accounting needs in a rapidly changing and increasingly complex business environment. Mr. Moritz has a broad range of expertise on audits of financial services clients, principally money center and international investment and commercial banks in addition to various audit and advisory-related projects. Mr. Moritz recently served as the managing partner of PwC's New York office and the New York Metro Region. He also led the Financial Services Audit and Business Advisory practice across the US, covering Banking, Capital Markets, Insurance, Investment Management and Real Estate. Mr. Moritz served a three-year tour in PricewaterhouseCoopers' Tokyo office, where he provided audit and advisory services to numerous European and US financial services organizations.

Martha Carnes

PricewaterhouseCoopers



Ms. Martha Carnes has over twenty-five years of experience with PricewaterhouseCoopers and is the leader of the firm's US Energy and Mining Assurance practice, as well as a PwC subject matter expert for the natural gas industry. She is responsible for ensuring that the services we deliver to our energy clients are of the highest quality through the appropriate allocation of resources, the technical and industry-specific training and development of our people, and the sharing of knowledge among our energy teams. Ms. Carnes serves a wide range of energy assurance clients, including natural gas transmission and distribution, natural gas and power trading and marketing, and oil and gas exploration and production.

Ms. Carnes is a contributing author to several energy industry textbooks and an instructor and course speaker for many of PwC's energy and technical training courses. She frequently speaks at PwC and industry conferences on current energy industry issues. Ms. Carnes has made presentations to members of the Interstate Natural Gas Association of America, the Federal Energy Regulatory Commission, Financial Executives International, Edison Electric Institute and the American Gas Association.

Join the Energy Board Network

The PricewaterhouseCoopers Energy Board Network is a group of directors that comes together throughout the year to discuss unique issues facing the energy industry.

2009 Event Schedule

Energy Board Symposium May 20, 2009

Opening keynote: Ian Bremmer, Eurasia Group

Luncheon keynote: T. Boone Pickens

Houstonian Hotel, Houston, TX

Energy Board Roundtable Series:

Topic to be determined September 14, 2009

Houstonian Hotel, Houston, TX

Past Events

Energy Board Symposium May 2008

Full day seminar with topics on geopolitics, fair value accounting, IFRS, energy policy, sustainability, MLPs and a keynote address by Lee Raymond, former Chairman and CEO of Exxon Mobil Corporation.

Energy Board Roundtable August 2008

Facilitated roundtable discussion on succession planning.

Energy Board Roundtable October 2008

Facilitated roundtable discussion on the Foreign Corrupt Practices Act.

Energy Board Roundtable October 2008

Facilitated roundtable discussion on US energy policy with Peter Robertson, Vice Chairman of Chevron Corporation and John Felmy, Chief Economist, American Petroleum Institute.

Impact of Capital Markets January 26, 2009

Facilitated roundtable discussion on the financial crisis and the impact on capital markets.

To join the Energy Board Network and receive publications and event invitations, contact Kirstin Feazel at 713-356-4031 or kirstin.feazel@us.pwc.com.



About PricewaterhouseCoopers

PricewaterhouseCoopers (www.pwc.com) provides industry-focused assurance, tax and advisory services to build public trust and enhance value for its clients and their stakeholders. More than 154,000 people in 153 countries across our network share their thinking, experience and solutions to develop fresh perspectives and practical advice.

About the PricewaterhouseCoopers Energy and Utility Practices

Recognized globally for deep energy and utility industry experience, PricewaterhouseCoopers has an extensive history of providing expert resources and proven solutions that enable energy and utility companies to meet their business imperatives. By providing audit, tax and business advisory services to the Supermajors, key National Oil Companies, utilities and the vast majority of the Fortune 500, PricewaterhouseCoopers' professionals possess the experience necessary to provide optimal insight and impact.

The global energy and utility practice of more than 4,000 professionals, including 350 partners, is committed to building meaningful relationships with energy and utility clients. Commitment to the energy and utility industries goes beyond service delivery and is demonstrated by an additional focus on knowledge sharing accomplished through thought leadership publications, educational opportunities and industry event participation and sponsorship.

